

AMENDMENTS TO THE DRAWINGS

The attached sheets of drawings include formal drawings of FIGS. 1-10B. These sheets, numbered 1-12 and including FIGS. 1-10B, replace original sheets 1-12, which include FIGS. 1-10B. FIGS. 1-10B have been replaced to comply with 37 C.F.R. §1.84(1).

Attachment: Replacement sheets 1-12

REMARKS

Status of the Claims

The present Office Action addresses claims 1-52, however claims 13, 14, 19, 20, 24, 32, and 36-52 are withdrawn from consideration. Remaining claims 1-12, 15-18, 21-23, 25-31, and 33-35 stand rejected.

Amendments to the Claims

Applicant cancels previously withdrawn claims 36-52. Applicant reserves the right to pursue cancelled claims in a divisional application.

Applicant amends claim 1 to include language from claims 4 and 6. In particular, claim 1 is amended to recite that the spinal anchoring element has a bore extending therethrough and that the closure mechanism is adapted to receive a locking mechanism to engage the bore. Claim 1 is also amended to recite a fastening element adapted to extend through the bore to mate the spinal anchoring element to bone. Applicant also amends claim 21 to recite that at least one of the spinal anchoring devices is adapted to receive a fastening element for mating the spinal anchoring device to bone and a closure mechanism axially aligned with the fastening element to lock the first and second spinal fixation elements to the spinal anchoring device. Support for these amendments can be found throughout the specification, for example in paragraphs [0038] and [0041] of the published application.

Applicant amends dependent claims 3, 4, 6, and 22 to reflect the amendments of independent claims 1 and 22.

No new matter is added.

Objections to the Drawings

Formal drawings are attached, as discussed above.

Rejections Pursuant to 35 U.S.C. § 102

Claims 1-12, 15, 18, 21-23, 25-31, and 33 are rejected pursuant to 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,136,002 ("Shih"). Applicant respectfully disagrees.

Claims 1-12, 15 and 18

Independent claim 1 recites a spinal anchoring element adapted to seat first and second spinal fixation elements at a distance spaced apart from one another, and having a bore extending therethrough. Claim 1 further recites a fastening element adapted to extend through the bore to mate the spinal anchoring element to bone and a closure mechanism adapted to mate to the spinal anchoring element to lock each of the first and second spinal fixation elements in a fixed position relative to the spinal anchoring element. The closure mechanism is adapted to receive a locking mechanism that engages the bore.

Shih does not teach or suggest a spinal anchoring element having a bore extending therethrough, a fastening element adapted to extend through the bore to mate the spinal anchoring element to bone, and a closure mechanism adapted to receive a locking mechanism that engages the bore in the spinal anchoring element. The Examiner likens Shih's vertebral plate system (10) to Applicant's spinal anchoring element and Shih's universal cover plate (14) to Applicant's closure mechanism. The only bores extending through the vertebral plate system (10) are screw holes (124). The screw holes (124) seat vertebral screws (B), thus they cannot receive a locking mechanism for mating the universal cover plate (14) to the plate system (10). Furthermore, the screw holes (124) do not align with any element of the universal cover plate (14) so as to allow the universal cover plate (14) to receive a locking mechanism adapted to engage the screw holes (124). Indeed, the universal cover plate (14) secures the rods (40) against the heads (BH) of the screws (B), so both the rods (40) and the screws (B) provide a barrier between the universal cover plate (14) and any locking mechanism the universal cover plate (14) could receive that could engage the screw holes (124).

Applicant also notes that hole (H) of the vertebral plate system (10) is not a bore *extending therethrough* as seen, for example, in FIGS. 2 and 3. Hole (H) is merely a blind hole, and the locking nut (S) does not pass through the vertebral contact surface (120) and thus cannot engage bone. Thus, Shih does not disclose a device that is capable of functioning as claimed.

Accordingly, claim 1, as well as claims 2-12, 15, and 18 which depend therefrom, distinguish over Shih and represent allowable subject matter.

Claims 21-23, 25-31, and 33

Independent claim 21 recites first and second flexible spinal fixation elements and a plurality of spinal anchoring devices adapted to mate to a plurality of vertebrae and to engage the first and second spinal fixation elements such that the first and second spinal fixation elements can be tensioned between the plurality of spinal anchoring devices to adjust a position of the plurality of vertebrae in both a sagittal plane and a coronal plane when the plurality of spinal anchoring devices are implanted in a plurality of vertebrae. At least one of the spinal anchoring devices is adapted to receive a fastening element for mating the spinal anchoring device to bone and a closure mechanism axially aligned with the fastening element to lock the first and second spinal fixation elements to the spinal anchoring device.

Shih does not teach or suggest that at least one of the spinal anchoring devices is adapted to receive a closure mechanism axially aligned with a fastening element. FIG. 2 of Shih clearly shows the locking nut (S) that is inserted in the hole (H) in the center of the vertebral plate system (10) and two screws (B) that are inserted through two separate bores (124) in the rod-seating channels. The universal cover plate (14) and the screws (B) are not and cannot be axially aligned. Thus, Shih does not disclose a device that is capable of functioning as claimed.

Accordingly, claim 21, as well as claims 22, 23, 25-31, and 33 which depend therefrom, distinguish over Shih and represent allowable subject matter.

Rejections Pursuant to 35 U.S.C. § 103

Claims 16-17, and 34-35 are rejected pursuant to 35 U.S.C. § 103(a) as being obvious over Shih in view of U.S. Publication No. 2004/0236327 ("Paul"). At least for the reasons explained above, Shih does not anticipate independent claims 1 and 21 from which claims 16-17 and 34-35 respectively depend. Paul is only relied on for dependent claim features, namely that a spinal fixation element can be flexible and can be formed from a bioabsorbable material. Paul does not

remedy the deficiencies of Shih because Paul likewise fails to disclose a spinal anchoring element having a bore extending therethrough, a fastening element adapted to extend through the bore to mate the spinal anchoring element to bone, and a closure mechanism adapted to receive a locking mechanism adapted to engage the bore. Paul also fails to disclose that at least one of the spinal anchoring devices is adapted to receive a closure mechanism axially aligned with a fastening element. Accordingly, claims 16-17 and 34-35 are allowable at least because they depend from an allowable base claim.

Conclusion

Applicant submits that all claims are in condition for allowance, and allowance thereof is respectfully requested. Applicant's amendment of the claims does not constitute a concession that the claims are not allowable in their unamended form. The Examiner is encouraged to telephone the undersigned attorney for Applicant if such communication is deemed to expedite prosecution of this application.

Dated: February 7, 2008

Respectfully submitted,

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Attachments

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